



## Chronic diseases, climate change and complexity: The hidden connections

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### Abstract:

In this paper the argument is presented that we can expect an increase in chronic diseases within developing countries such as South Africa and that this is largely due to changes in lifestyle, such as diet and exercise. While these lifestyle choices are ultimately made at an individual level, they are often constrained and shaped by powerful environmental and societal forces such as globalisation, urbanisation and mechanisation. These same changes in lifestyle are also intimately linked to increasing greenhouse gas emissions and the development of climate change. A diet more reliant on meat and refined and processed foods has a much higher carbon footprint. Reductions in physical activity are linked to increases in the use of motorised transport and further increases in greenhouse gas emissions. The emergence of chronic diseases and climate change are therefore connected and both stem from unhealthy overconsumption of resources. The emergence of these phenomena can be understood in terms of complexity theory as properties of a complex non-linear social system. Complex systems by their very nature are unpredictable and yet share certain typical characteristics. These characteristics of complex systems raise questions regarding how we can disturb the system to have healthier and more sustainable emergent properties. Four key areas to consider are disturbing the network, the technology, the social structures and rules and the meaning manifested in the system.

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### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Unspecified Exposure, Unspecified Exposure

#### Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

#### Geographic Location:

resource focuses on specific location

Non-United States

# Climate Change and Human Health Literature Portal

**Non-United States:** Africa

**African Region/Country:** African Country

**Other African Country:** South Africa

**Health Co-Benefit/Co-Harm (Adaption/Mitigation):** ☐

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

**Health Impact:** ☐

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

**Mitigation/Adaptation:** ☐

mitigation or adaptation strategy is a focus of resource

Mitigation

**Resource Type:** ☐

format or standard characteristic of resource

Research Article, Review

**Timescale:** ☐

time period studied

Time Scale Unspecified